Efficiency at its most beautiful

High-end heat pump | EcoTouch Ai1 Compact

WATERKOTTE

Decentral heat generation using heat pumps

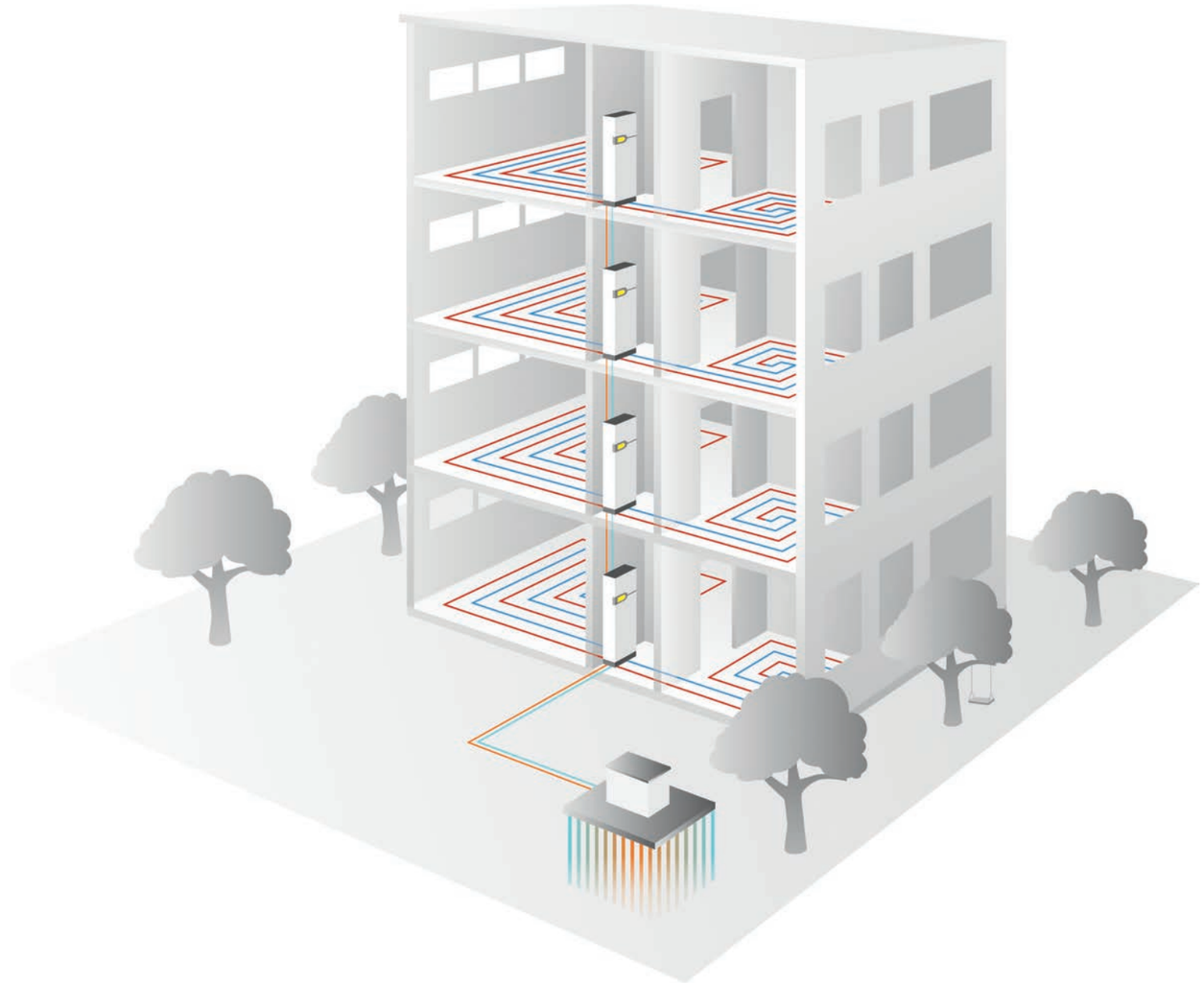
The concept for new and existing blocks of flats

High end in the lowest power range
With the EcoTouch Ai1 Compact we are aiming at maximum efficiency and maximum compactness in the smallest power class. The inverter-controlled heat pump covers a power range from 1 – 4 kW and is equipped with only the highest quality components. In way the innovation always ensures the highest efficiency and performance – a WATERKOTTE premium product.

Compact all-in-one heating system
The EcoTouch Ai1 Compact is a complete heating system that, following the all-in-one motto, contains all system components for heating, cooling and domestic hot water production. The safety groups are already integrated into the housing. In conjunction with the connections on the underside, simple system installation is possible without additional effort.

Ideal for residential construction
The innovative very small heat pump is predestined for use in residential construction and also in refurbishment projects. It covers the heating and domestic hot water demand for individual residential units up to 80 m². Due to the optimal space requirement of 0.3 m², the heat pump can be space-savingly integrated into even the smallest utility room.

Central heat source
The starting point for a heating concept including the EcoTouch Ai1 Compact is the heat source. The decentral heat pumps are supplied with ambient heat via a central heat source. Along with geothermal energy probes, groundwater wells and surface collectors, ice storage tanks or waste heat are appropriate heat sources.



EcoTouch Ai1 Compact - perfect for your construction project

- SMALL DEVICE SPACE REQUIREMENT FOR PERFECT INTEGRATION
- VERY EASY TO OPERATE - ALSO MOBILE
- UNCOMPLICATED SYSTEM INSTALLATION
- NATURAL COOLING FOR MAXIMUM COMFORT
- UTILITIES BILLING PER RESIDENTIAL UNIT
- FINANCIAL INDEPENDENCE OF FUELS
- COMPLIANCE WITH THE REQUIREMENTS OF THE GERMAN DRINKING WATER ORDINANCE
- VARIABLE CENTRAL HEAT SOURCE
- FLEXIBLE PLANNING AND STEPWISE BUILDING REFURBISHMENT
- PERMITS MODERN CONTRACTING MODELS

Decentral heat generation
The energy from the heat source is supplied to the pipe system in the building and distributed to the individual residential units. Only here is the temperature from the decentral heat pumps raised to the temperature level necessary for heating. Thanks to the autonomous principle of operation, refurbishment projects can be implemented flat by flat.

A rounded overall concept
The overall system offers attractive possibilities for contracting. The billing of heating costs is not required - the electricity meter in the flat provides the billing for the electricity costs. We support you with sound know-how from the determination of the heat demand to the design of the operator model. We would be pleased to prepare a suitable concept also for your construction project.

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EcoTouch Ai1 Compact | Power range from 1 – 4 kW

reddot award 2018
winner

ICO 2018 AWARDS
INNOVATIVE ARCHITECTURE
selection

GERMAN DESIGN AWARD WINNER 2019

Up to **SCOP 5.5**

INVERTER TECHNOLOGIE by WATERKOTTE

A+++ and A++: Energy efficiency class combined system (incl. WWPR III controller) heating W10/W55 and DHW production. Variations within the series possible.

Very small heat pump for residential units
The EcoTouch Ai1 Compact is a fully fledged central heating system with an integrated hot water tank that has a capacity of 121 litres. The heat pump covers the heating and domestic hot water demand of flats up to 120 m².

Completely high-end
With COP values up to 4.6, the heat pump is the most efficient in its class. The high-quality features, the colour touch display and state-of-the-art control technology with Internet-support impress as a premium product.

Suitable for every living room
The small space requirement of 0.3 m² and the connections on the underside make possible flexible system installation – ideal for the smallest utility rooms. The unit design is also optimised for servicing.

Hardly audible, easy to operate
The high-quality housing has special noise insulation. In this way the noise emissions are reduced to a minimum. Control is intuitive and logical via the high-quality touch display.

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Features

- Very small heat pump for individual flats
- Inverter technology
- Colour 4.3" touch display
- Integrated web interface for app control
- Intuitive control software EasyCon
- Central power switch
- Sensor system with numerous sensors
- COP counter and display of all operating data
- Stainless steel storage tank with 121-litre capacity
- Automatic Legionella protection circuit
- Integrated electrical heating element
- Chlorine-free refrigerant R410A without ozone depletion
- Signal for the regulation of the speed of the circulation pumps
- Speed-controlled circulation pumps of efficiency class A
- Integrated vibration damper Silenter®
- Easy to service unit design
- Connections on the underside
- Unit dimensions (W x H x D): 834 x 1950 x 399 mm

Optional features

- Natural cooling
- Controller expansion for additional mixer circuits

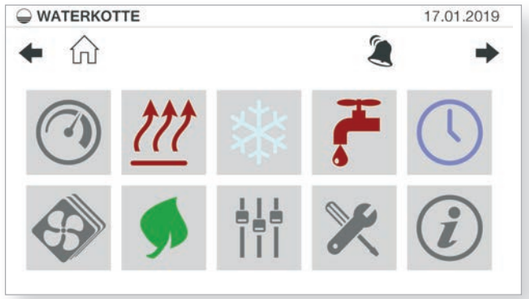
Highlights

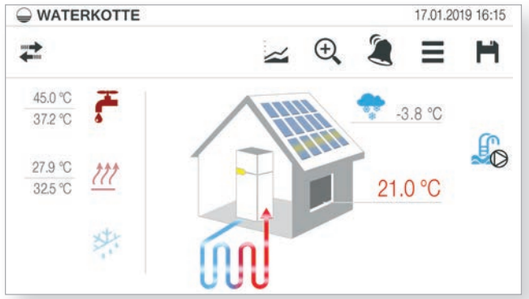
- Low operating costs due to COP values up to 4.6 and SCOP values up to 5.5
- Touch display with innovative EasyCon software
- Fully integrated into the Internet
- Smartphone control via EasyCon Mobile
- High-quality hot water tank
- Legionella protection due to high tank temperatures
- Housing insulation with maximum thermal insulation
- Ready-to-use assembly
- Reduced space requirement 0.3 m²

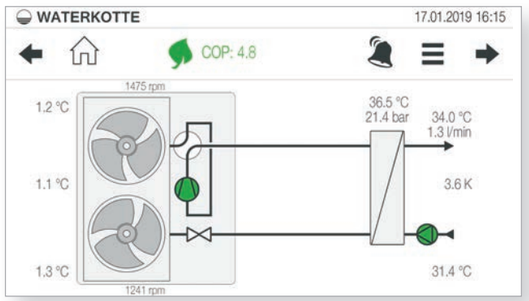
The best is feasible.

"Our flat has its own heating system. The WATERKOTTE heat pump is space-savingly installed in the utility room and make our home a very special experience."

EasyCon Software | The new type of control







Touch symbols in colour
As the name suggests, EasyCon makes the operation of your heat pump even easier. The software uses simple, self-explanatory symbols like on a Smartphone. The symbols on the colour touch display of the EcoTouch units require only a light touch.

This is as easy as it gets
The symbols, also referred to as icons, are self-explanatory. You therefore always have quick access to all important functions of the unit. Setting the desired temperature or timer program is child's play. Operating a heating system without the operating manual has never been easier.

Comprehensive data evaluation
On the large colour display you can evaluate a variety of data. The actual consumption data, performance data and operating states are clearly displayed in graphics. This is made possible by the data acquisition by the sensor system and the mathematical analysis by EasyCon.

Fully integrated into the Internet
The particularly advanced feature of EasyCon, in addition to the modern user Interface, is its easy integration into the network. As a standard, all heat pumps in the EcoTouch series are connected to the network via the touchscreen. The free app EasyCon Mobile allows you to control your heat pump even while you are on the move.

Features of the control unit

- Touch Display, 4.3”
- Icon orientated user interface that makes it easy to use, configure and monitor
- Control via Smartphone app
- USB Port integrated as standard to permit upgrades and uploading of logged data
- Network Ethernet Port for remote access

Software

- Modern Control technology
- Efficient automation of heating and cooling
- Additional Control Functions included as standard:
  - Integration of Solar Thermal
  - Integration of Photovoltaics (PV)
  - Second Heating Circuit
  - Three additional Weather Compensated (Mixing Circuits)
- Energy Monitoring included as standard
- Advanced Bivalent control possibilities
- Remote Control via EasyCon mobile app
- Automatic Screen Saver

Easy to use

- Intuitive EasyCon touch control interface
- System state clear to see
- Touch shortcuts to main system functions
- Dynamic display of refrigerant circuit
- Automatic email failure messages
- Graphical display of temperatures (current and historic)
- Continuous display of energy performance (SPF / COP)
- Individual timer program and vacation mode
- Internet Connection and Web interface included as standard

EasyCon | Mobile app control

Quick and convenient via Internet
With the EasyCon applications for mobile control, you can access your WATERKOTTE products via Smartphone or tablet. This is made possible by an Internet connection that you can establish with your heat pump via the app and a web interface.

Free of charge and easy to install
EasyCon Mobile is available free of charge as an Apple or Android app for your Smartphone or your tablet computer. Simply download from Internet and install. Then enter your heat pump ID, and you are connected.

Controlling your heat pump on the move
The menu structure of the applications for mobile control is like the control software that is installed on your heat pump. This allows immediate and intuitive navigation. With the software you are able to send mobile control commands, or check data evaluations.

More ease of use and less costs
Your WATERKOTTE products can be controlled on the move using the EasyCon applications. This results in real ease of use. You can switch on your heating very easily from the sofa using the mobile control. Saving costs has never been so much fun.

GET IT ON Google Play Download on the App Store

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Features

- Control and monitoring software for heat pumps,living area ventilation, energy storage and building services
- Multilingual full version
- Intuitive menu structure
- Available as Apple and Android app
- Can be installed on Smartphones and tablet PCs
- Expandable, e.g. for living area ventilation

Technical requirements

- Available LAN network
- Existing Internet access via provider
- Router with a spare RJ45 connection
- WATERKOTTE products in the EcoTouch series
- WATERKOTTE RemoteBox / SmartBox

Highlights

- Free control software
- Continuous system overview
- Comprehensive display of measured data
- Active system messages from the heat pump

Technical data | EcoTouch Ai1 Compact

EcoTouch Ai1 Compact with R410A		5003.5 (NC)
Heat source groundwater [1]		
Power input/output W10/W35, partial load operation	kW	0.4 / 1.8
Coefficient of performance (COP) at W10/W35		6.6
Power regulation W10/W35	kW	1.8 - 5.5
Room heating energy efficiency [2] / domestic hot water production energy efficiency load profile L		A+++ / A+
Energy efficiency class of the combined system [3] room heating / domestic hot water production load profile L		A+++ / A+
Groundwater flow rate	m³/h (ΔT=3K)	1.4
Groundwater flow rate, minimum	m³/h [4] (ΔT=6K)	0.7
Heating water flow rate	m³/h (ΔT=5K)	1.0
Operating limit		W10/W63
Sound power level for W10/W35 [6]	dB(A)	40-45 (frequency-dependent)
Heat source ground		
Power input/output B0/W35, partial load operation	kW	0.6 / 2.4
Coefficient of performance (COP) at B0/W35		4.6
Power regulation B0/W35	kW	1.3 - 4.1
Room heating energy efficiency [2] / domestic hot water production energy efficiency load profile L		A++ / A
Energy efficiency class of the combined system [3] room heating / domestic hot water production load profile L		A++ / A
Heat source flow rate [5]	m³/h (ΔT=3K)	1.0
Heating water flow rate	m³/h (ΔT=5K)	0.8
Max. power input HS pump	W	75
Max. power input heat pump	W	75
Operating limit		B-5/W63; B0/W63
Compressor		Rotary piston
Sound power level, 36 Hz [6]	dB(A)	39.9
Sound power level, 60 Hz [6]	dB(A)	44.7
Sound power level, 90 Hz [6]	dB(A)	44.9
Electrical data		
Electric power supply	V, AC, Hz	230, 1, 50
Max. operating current	A	25
Main fuse, compressor (on site)	A	C 25 A
Dimensions, weights, connections		
Weight of device, without tank filling	kg	199 (NC: 205)
Refrigerant filling	kg	0.75
Connections: Heat source / use		1" / 1“
Dimensions W x H x D	mm	834 x 1950 x 399
Domestic hot water tank	l	121

Subject to technical changes. Tolerances as per EN 12900, EN 14511 and EN 12102 apply.

[1] Groundwater source heating is to be used with an intermediate circuit, for solutions, please refer to our product range. Our performance data are based on this system configuration. [2] Medium-temperature application, average climate conditions [3] On the combined system the WATERKOTTE WPRs controller class II was taken into account (without room temperature sensor).[4] At W10/W35 and ΔT=6K. [5] Heat source (70 % water + 30 % ethylene glycol). [6] At W10/W30 (+- 10K)

WATERKOTTE

WATERKOTTE GmbH
Gewerkenstrasse 15
D-44628 Herne
Tel.: +49 2323 | 9376 - 0
Fax: +49 2323 | 9376 - 99
Service Tel.: +49 2323 | 9376 - 350
info@waterkotte.de
www.waterkotte.de

WATERKOTTE Schweiz AG
Oberdorfstr. 37
CH-1735 Giffers
Tel.: +41 26 | 684 82 40
Fax: +41 26 | 684 82 41
info@waterkotte.ch
www.waterkotte.ch

WATERKOTTE Austria GmbH
Carolinenstrasse 10
A-9073 Klagenfurt-Viktring
Tel.: +43 463 | 29403 - 0
Fax: +43 463 | 29403 - 018
wouk@waterkotte.at
www.waterkotte.at

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